

CLAIMS

1. An isolated polynucleotide molecule encoding an isolated peptide molecule as shown in SEQ ID NO:12, said peptide molecule consisting of residues X through Y, wherein X is an integer from 1 to 4, inclusive, and wherein Y is 14 or 18, and wherein at least (Y minus X) minus 2 residues are as in the corresponding region of SEQ ID NO:11.

2. An isolated polynucleotide molecule according to claim 1, wherein at least (Y minus X) minus 1 residues are as in the corresponding region of SEQ ID NO:11.

3. An isolated polynucleotide molecule according to claim 2, wherein at least (Y minus X) residues are as in the corresponding region of SEQ ID NO:11.

4. The isolated peptide molecule of claim 1.

5. A method of modulating contractility in duodenum or jejunum tissue comprising applying the isolated peptide of claim 4 to said tissue.

6. A method of modulating pancreatic secretion of hormones and digestive enzymes comprising administering the isolated peptide of claim 4 to a mammal.

7. An isolated polynucleotide molecule encoding an isolated peptide molecule as shown in SEQ ID NO:12, said peptide molecule consisting of residues X through 11, wherein X is 1 or 2, and wherein at least (11 minus X) minus 2 residues are as in the corresponding region of SEQ ID NO:11.

8. An isolated polynucleotide molecule according to claim 7, wherein at least (11 minus X) minus 1 residues are as in the corresponding region of SEQ ID NO:11.

9. An isolated polynucleotide molecule according to claim 9, wherein at least 11 minus X residues are as in the corresponding region of SEQ ID NO:11.

10. The isolated peptide molecule of claim 7.

11. A method of modulating contractility in duodenum or jejunum tissue comprising applying the isolated peptide of claim 10 to said tissue.

12. A method of modulating pancreatic secretion of hormones and digestive enzymes comprising administering the isolated peptide of claim 10 to a mammal.

13. An isolated polynucleotide molecule encoding an isolated peptide molecule as shown in SEQ ID NO:12, said peptide molecule consisting of residues 1 through 10, and wherein at least seven residues are as in the corresponding region of SEQ ID NO:11.

14. An isolated polynucleotide according to claim 13, wherein at least eight residues are as in the corresponding region of SEQ ID NO:11.

15. An isolated polynucleotide according to claim 13, wherein at least nine are as in the corresponding region of SEQ ID NO:11.

16. The isolated peptide molecule of claim 13.

17. A method of modulating contractility in duodenum or jejunum tissue comprising applying the isolated peptide of claim 16 to said tissue.

18. A method of modulating pancreatic secretion of hormones and digestive enzymes comprising administering the isolated peptide of claim 16 to a mammal.

19. An isolated polynucleotide molecule encoding an isolated peptide, wherein the peptide is selected from the group consisting of:

- a) residues 2 to 18 of SEQ ID NO:11;
- b) residues 2 to 14 of SEQ ID NO:11;
- c) residues 3 to 18 of SEQ ID NO:11;
- d) residues 3 to 14 of SEQ ID NO:11;
- e) residues 4 to 18 of SEQ ID NO:11;
- f) residues 4 to 14 of SEQ ID NO:11;
- g) residues 1 to 11 of SEQ ID NO:11;
- h) residues 1 to 10 of SEQ ID NO:11; and
- i) residues 2 to 11 of SEQ ID NO:11.

20. The isolated peptide molecule of claim 19.

21. A method of modulating contractility in duodenum or jejunum tissue comprising applying the isolated peptide of claim 20 to said tissue.

22. A method of modulating pancreatic secretion of hormones and digestive enzymes comprising administering the isolated peptide of claim 20 to a mammal.